CHAPTER 2

PHILOSOPHY, GOALS, AND OBJECTIVES

OBJECTIVES

After reading this chapter, students should be able to—

■ Discuss key concepts of philosophy and their application to the disciplines within physical education, exercise science, and sport.
■ Begin to develop a professional philosophy.
■ Describe potential goals and objectives that can be developed within physical education, exercise science, and sport.
■ Describe the cognitive, affective/social, and psychomotor learning domains and apply these domains to the different disciplines.
■ Describe the purposes and the importance of assessment in physical education, exercise science, and sport.

Professionals in physical education, exercise science, and sport face the challenge of preparing children, youth, and adults—across a wide range of social identities and a multitude of needs, to engage in a physically active and healthy lifestyle. To provide instruction and practice that can enhance the number of individuals who are physical movers for a lifetime, it is important for you to develop a professional philosophy that reflects your experiences and beliefs within your discipline.

As discussed in Chapter 1, your social identities and systems of meaning influence your beliefs, what you value, and your lived experiences in all aspects of your life. It also influences your philosophy for the profession in which you aspire to do. At the onset of this chapter, we are asking you to continue to reflect on your social identities and systems of meaning and relate them to what will develop into your professional philosophy.

Your professional philosophy creates a framework (i.e., a way of thinking, a perspective) in which you formulate the goals and objectives of your program. As professionals, we must define the goals and objectives of our programs based on the context in which we work, whether in a corporate fitness center, cardiac rehabilitation program, or a community sports program. Clearly
defined goals and objectives are essential if physical education, exercise science, and sport programs are designed to foster optimal human development, enhance health, and enrich the quality of life of all individuals.

Within this chapter, we will discuss the major philosophies; the philosophy of sport and physical activity; the goals and objectives of physical education, exercise science, and sport; the cognitive, affective/social, and psychomotor domains; and the implementation of assessment within instruction and practice.

PHILOSOPHY
The term philosophy can conjure up a variety of visions and reactions depending on the person. At that time, ask yourself, how do you respond when you hear the word philosophy? What is your current perspective about philosophy? How does philosophy play a role in your personal and professional lives?

What Is Philosophy?
Philosophy, derived from the Greek word philosophy, means “the love of wisdom.”¹ Philosophers pursue the truth through the systematic investigation of reality, knowledge, meanings, and values. Philosophy is a system of values by which one lives and works. Your system of beliefs and values guides your conduct in both your personal life and professional life. Philosophy helps individuals address the problems that confront them through the use of critical thinking, logical analysis, and reflective appraisal. Our philosophy is greatly influenced by our lived experiences and those lived experiences are often dependent upon our social identities. Some of you have had to challenge and question the status quo and/or systems en route to developing your beliefs and values.

Questions that reflect the concerns of philosophers include the following:

- What is the role of human beings on this earth?
- What are the origin and nature of the universe?
- What constitutes good and evil and right and wrong?
- What constitutes truth?
- Is there a God?
- What relationship exists between mind and body or matter?

Are there additional questions you have philosophized about that are not listed? What were they? What brought you to philosophize about such topics? Throughout the remainder of the philosophy section, consider how these philosophies can relate to your personal life and future professional career.
Philosophy, Goals, and Objectives

Approach to study how ideas relate to each other and applies sound and reasoned judgment to decision making. Logic can help members of our field design sound research approaches or organize facts to document the contribution of physical activity to well-being.

Axiology examines the nature of values. Two extensions of axiology are ethics and aesthetics. Ethics is concerned with issues of right and wrong, responsibility, and standards of conduct. Speculative in nature, ethics examines moral values. Moral reasoning helps people determine what the right thing to do is in a given situation or circumstance. The development of character, the nature of fair play, and issues of justice are just a few of the ethical concerns of physical education, exercise science, and sport. Aesthetics is the study of the nature of beauty and art. The beauty of skilled movement and artistic expression through dance enable us to see movement as an art form.

These branches represent different aspects of philosophy. In developing a comprehensive philosophy for a discipline, such as physical education, exercise science, or sport, each of these areas is addressed. The Branches of Philosophy box highlights the focus of each branch, provides a typical general question that may be posed, and shows how these questions may be framed within the context of physical education, exercise science, and sport.

Major Philosophies

The six major philosophies that have been typically described with respect to their impact on physical education, exercise science, or sport are idealism, realism, pragmatism, naturalism, existentialism, and humanism. Although space precludes an extensive discussion of each philosophy, a brief overview of the basic tenets of each is provided, with suggestions of how they can potentially influence professionals in their work.

Idealism

As a philosophy, idealism emphasizes the mind as central to understanding and the critical role that reasoning plays in arriving at the truth. Under this...
philosophy, values and ideals are held in high regard and are considered to be universal and absolute. Values and ideals do not change, regardless of circumstances.

Professionals who follow the tenets of idealism would emphasize the development of character, the importance of values, and the application of reasoning in their work. A youth sport coach who espoused the philosophy of idealism would promote the development of character and the ideals of sportspersonship among the athletes on their team over winning. A fitness leader who believed in the philosophy of idealism would place a high value on serving as a role model to their clients. A cardiac rehabilitation specialist who followed the tenets of idealism would solicit from their cardiac patient, a former runner, the meaning running held for them, understand the patient’s desire to return to running, and work with the patient to develop a realistic rehabilitation program to accomplish this goal.

**Realism**

The philosophy of *realism* emphasizes the use of the scientific method to arrive at the truth. Reasoning and understanding the natural laws of nature are features of this philosophy. The total development of the person is important, and physical activity has an important role in this endeavor.
Although pragmatists see truth as variable and rightness as individually determined, they emphasize social responsibility. Pragmatists emphasize problem solving, consideration of individuals’ needs and interests, development of individuals’ social skills, and cooperation.

A pragmatist conducting a community fitness program for older adults would design the program to meet their needs and interests. A college recreational sports director would be sure to include a variety of different activities in the program offerings, so that the students would be able to choose activities that were personally meaningful and enjoyable. A corporate worksite health promotion specialist who believed in the pragmatic approach may choose to incorporate Project Adventure problem-solving activities into a special program for middle managers; after the completion of the activities, they would ask them to share perceptions of their experiences while the specialist facilitated the discussion.

An exercise physiologist who subscribed to the philosophy of realism would carefully evaluate the scientific evidence in order to better understand the contribution of different types of physical activity to health. Physical educators who believed in realism would incorporate frequent assessment procedures into their classes, so that their students would have a means to monitor their progress toward attainment of their goals. In accordance with this philosophical approach, coaches would select training techniques based on the scientific evidence of their effectiveness, and would use a systematic, progressive approach in designing practices.

**Pragmatism**

According to the philosophy of pragmatism, experiences—not ideals or realities—are the basis of truth. Because individuals experience different situations, reality differs from person to person. Thus, within this philosophical approach, whatever works in a given situation at a given time is seen as successful.
Naturalism

The belief that life is governed by the laws of nature is central to the philosophy of naturalism. Naturalism emphasizes the importance of considering each individual’s level of growth and development in learning, and designing experiences that are congruent to the individual’s needs. Self-direction, individualized learning, and competition against oneself are important in this approach. Play and outdoor activities provide beneficial opportunities for exploration and problem solving as a means of personal growth and learning.

Physical educators who believe in the philosophy of naturalism would use developmentally appropriate physical activities with their students at all levels of instruction, and individualized learning would be emphasized. Fitness leaders who adhere to the tenets of naturalism would encourage their program’s participants to take advantage of opportunities to engage in outdoor pursuits during their leisure time as a means of incorporating physical activity into their lifestyle.

Existentialism

According to the existentialist philosophy, reality is determined by individuals’ experiences. An individual’s experiences and choices create a uniquely personal worldview and affect their perception of reality. Existentialism emphasizes the freedom of individuals to think as they choose and to make choices, but stresses that they must accept the consequences of their actions. Creativity, individuality, self-responsibility, and self-awareness are important aspects of this philosophy; learning experiences should reflect these attributes.

Under the existentialist philosophy, a sport psychologist would encourage an athlete to carefully reflect upon their experiences to identify the thoughts that led to poor performances. The sport psychologist would offer the athlete a variety of options to deal with these issues, allowing the athlete to choose among the alternatives. A coach who advocated for an existentialist philosophy would emphasize the athlete’s responsibility in adhering to the established code of conduct. The coach may allow some individuality in dress, but would emphasize the athlete’s responsibility in adhering to training rules. A physical educator would allow students to select from a variety of activities within the program, promoting reflection and individual responsibility for learning.

Humanism

A humanistic philosophy emphasizes the development of the full potential of each individual. Personal growth, self-actualization, and the development of values are central tenets of this philosophy. Treating students as individuals, valuing the dignity of each person, enhancing self-esteem, fostering personal and social development, and promoting self-responsibility are hallmarks of this approach. Within the realm of physical education, exercise science, and sport, humanism encourages a greater emphasis on meeting individual needs, and recognizes that one type of program is not suited for all individuals. The feelings, needs, goals, capabilities, and limitations of individuals should be carefully considered in conducting programs. For example, in corporate fitness, programs are designed to meet the needs of individual clients, assumption of responsibility for one’s own health and fitness is stressed, and a holistic approach to health is emphasized.

Collectively, the beliefs and tenets of the traditional philosophies of idealism, realism, pragmatism, naturalism, existentialism, and humanism have influenced physical education, exercise science, and sport programs.

Modern Educational Philosophy

Today’s educational philosophy reflects several influences. Most schools today follow an educational philosophy based on many of the beliefs advocated by John Dewey. John Dewey is recognized as the leader of the progressive education movement, and his ideas were influential in shaping American education.

Dewey’s ideas of progressive education reflect a pragmatic orientation. Progressives believed that
The physical was to become one of the most important influences on twentieth-century physical education.²

The Mind-Body Relationship

What is the relationship between the mind and the body? Are they separate, independent entities? Or are the mind and body a unified, interdependent, dynamic organism? Philosophers have long debated these questions, resulting in varying answers and perspectives.

The belief that the mind and the body are separate entities is termed dualism. Dualism views the mind and the body as independent, with either the mind or the body being superior. Usually, dualists emphasize the superiority of the mind over the body, relegating the body to an inferior role. The reduction or elimination of school physical education programs in order to increase time for more “academic” pursuits reflects the emphasis on development of the mind at the expense of development of the body. There are other times in physical education, exercise science, and sport education was the avenue to improving the social conditions of society. Dewey’s approach of “learning by doing” significantly changed the nature of American education. This child-centered approach to learning emphasized children taking an active role in their learning, as opposed to being passive recipients of knowledge conveyed to them by the teacher.²

Dewey also believed in the unity of the mind and the body. Educational activities were viewed as contributing to the development of the total person, not just the mind. The tenets of progressive education lent support to the inclusion of physical education in the school curriculum. Physical activity developed the physical goals of education, as well as contributing to its intellectual and social goals. This philosophy of education through

### CENTRAL BELIEFS UNDERLYING TRADITIONAL PHILOSOPHIES

<table>
<thead>
<tr>
<th>Idealism</th>
<th>The mind interprets events and creates reality; truth and values are absolute and universally shared.</th>
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<tbody>
<tr>
<td>Realism</td>
<td>The physical world is the real world and it is governed by nature; science reveals the truth.</td>
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<tr>
<td>Pragmatism</td>
<td>Reality is determined by an individual’s life experiences; the individual learns the truth through experiences.</td>
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<tr>
<td>Naturalism</td>
<td>Reality and life are governed by the laws of nature; the individual is more important than society.</td>
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<tr>
<td>Existentialism</td>
<td>Reality is based on human existence; individual experiences determine what is true.</td>
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<tr>
<td>Humanism</td>
<td>Reality and life consider humans to be of primary importance; personal growth, self-actualization, and the development of values are emphasized.</td>
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programs when the emphasis is placed solely on the development of the body. When the development of the body is emphasized under this philosophical approach, this is referred to as education of the physical. As the mind and the body are separate entities, educating or developing the body has no effect on the mind.

In contrast to the dualist approach, monism views the mind and the body as a fused, unified entity. Because the mind and the body are viewed as a unified whole, neither one can be subservient to the other; physical activity is as important as intellectual activity. From this philosophic perspective, physical education is as important as the rest of the courses in the educational curriculum. When physical education, exercise science, and sport adopt this philosophical approach, physical activity is seen as a medium for the development of the total person. This approach of education through the physical is the most dominant force in contemporary physical education.

The monist, holistic approach is central to our mission of promoting lifespan participation in physical activity. Achievement of lifespan participation requires that professionals embrace the developmental approach to physical activity—that is, design physical activity programs to promote fitness and motor skills and to instill in participants an appreciation for the contribution of physical activity to one's total well-being.

**Philosophy of Sport and Physical Activity**

Sport philosophy emerged as a specialized area of study in the mid-1960s and into the 1970s. The definition, scope, and areas of study are discussed in this section.

**Definition and Scope**

Sport philosophy is the systematic and reflective study of the truth, meanings, and actions of sport. Sport philosophers use logic and reasoning to gain a broader understanding of how sport contributes to our lives, and to analyze the principles that guide our professional practices and actions. Sport philosophers study the values connected with sport, examine the relationship between the mind and body, and debate justice, equity, and ethical dilemmas. They call upon us as professionals to critically reflect upon our beliefs and assumptions about sport and challenge us to use our insight and knowledge for the well-being of others.

**Areas of Study**

As sport philosophy became more organized and sophisticated, philosophers undertook the investigation of a wider array of topics. Some of the questions sport philosophers may investigate include:

- How does one's social identities influence their ability to participate in sport?
- Why do some athletes risk permanent disability by continuing to participate in sport when injured?
- Why do adults persist in emphasizing winning in sport when children want to emphasize the fun elements associated with play?
- What is the relationship among play, work, and sport?
- How does athletic ability influence the meaning of sport for the participant? Are the values derived from participation in sport different for athletes of different abilities?
- How can opportunities to participate in physical activity be made more just and equitable?

The philosophies of physical activity and sport help us understand the meaning of movement and involvement to participants. This knowledge can help professionals make decisions and develop guidelines that will lead to a more positive experience for those involved. Sport philosophy offers us a systematic, reasoned approach to examining our beliefs, exploring the connections and relationships between our personal values, critically reflecting on societal values, and aligning our actions according to the goals and aims to be achieved.

**Your Professional Philosophy**

A professional philosophy is important for all physical educators, exercise scientists, and sport leaders. A professional philosophy will help you articulate
the worth and value of the discipline and will influence the design and leadership of your programs. Your philosophy will be reflected in your actions as a professional, the manner in which you handle the responsibility of being a role model, and your behaviors toward and interactions with the people you serve. It is important to understand that your professional philosophy may emphasize the philosophies discussed in this chapter as well as the many others that this chapter did not address. However, your professional philosophy will primarily emphasize your beliefs and values within your chosen profession, which may align or be supported by a professional organization’s vision or mission statement.

Your professional philosophy can serve as a guide in making equitable and ethical decisions as you confront many issues and problems within the field. When confronted with equitable and ethical decisions, you can use your professional philosophy to reflect on how you ought to act, what is right and wrong in the given situation, and what is just and unjust.

A professional philosophy will be helpful in addressing both societal and professional questions that may affect the conduct of your program, your actions as a professional, and the outcomes experienced by the people you are serving. Some general questions that a philosophy might help you address are:

• What has value in today’s society?
• What is relevant to the needs of people today?
• What are some inequities in opportunity that must be addressed? And what is my commitment to social justice?

As a professional, you will be confronted with many questions that must be addressed. Some examples are:

• Should youth sport programs mandate equal playing time for all participants?
• Should intercollegiate athletes be required to maintain a certain grade point average to participate?
• Should employees be required to participate in a corporate fitness program in order to receive health benefits?

• Should certification be required of all health-and-fitness club employees? If so, what certification should be required?
• Does an athletic director have a right to mandate that no athletes have social-media accounts?

A well-developed professional philosophy gives you some guidance in resolving these and a multitude of other questions and issues you will face.

Developing your professional philosophy will be one of your major tasks as you continue your professional preparation. One of the most commonly asked questions of job candidates by employers is, “What is your professional philosophy?” Your professional philosophy will likely change as you learn more about the field, acquire more professional experience, and come to understand who you are as an individual. As you begin to develop your professional philosophy, it may be helpful to think about your personal philosophy (which will relate to your social identities and systems of meaning) and use those beliefs and values as a starting point.

The guidelines presented in the Developing Your Professional Philosophy box will help you determine, define, and articulate your philosophy of physical education, exercise science, and sport. Collectively, professional philosophies and program goals and objectives within physical education, exercise science, and sport will be discussed.

Goals and Objectives Defined
Before we discuss the goals and objectives of physical education, exercise science, and sport, we will first define these terms. Goals are statements of purposes, intents, and aims that reflect desired accomplishments. Goals are expressed as general statements and are broad in their direction. They state long-term outcomes to be achieved by participants in the program.

Objectives are derived from goals. Objectives describe learning, specifically what individuals should know, do, or feel as a result of instruction. Objectives are more specific than goals. They are short-term statements of specific outcomes that build
from 15% to 30% the proportion of adults who engage regularly in moderate physical activity for at least 30 minutes per day.

Well-constructed objectives can take on many different forms and can be stated in many different ways. Most importantly, whatever the format, objectives should describe the behavior the individual will demonstrate when the desired outcome is achieved. When objectives are stated in terms that are measurable, they provide a means to assess the individual’s progress toward the achievement of the goal.

### DEVELOPING YOUR PROFESSIONAL PHILOSOPHY

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<tr>
<th>Steps</th>
<th>Questions to Consider</th>
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<tr>
<td>1. Review your past experiences in physical education, exercise science, and sport.</td>
<td>What were some of your most outstanding experiences in this field? What were some of your most disheartening ones? Why? Is there a professional you particularly admire, one who served as a role model for you or even prompted your entry into this field? If so, what was their philosophy?</td>
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<td>2. Read about the different philosophies.</td>
<td>What theories are compatible with your beliefs? What theories are at odds with them? How do these theories translate into practice? What are the characteristics of programs conducted from these philosophical perspectives?</td>
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<td>3. Review the philosophies of leaders in physical education, exercise science, and sport.</td>
<td>After reviewing the philosophies of leaders in the field, which of their beliefs are compatible with yours and which are incompatible? Why?</td>
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<td>4. Take advantage of opportunities you have during your professional preparation to talk to various professors about their philosophies.</td>
<td>What beliefs are evident in their teaching? As you critically examine your experiences during your professional preparation, do you ask yourself why things are the way they are? How could things change? How would these changes influence the philosophy of the program? Would these changes align with your professors’ beliefs and philosophies?</td>
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<td>5. Review the codes of conduct and ethical standards of various professional organizations.</td>
<td>Many physical education, exercise science, and sport professional organizations have standards of conduct that serve as guidelines for their members. What are the standards of conduct expected of professionals entering your prospective field? What are the expectations for service to the profession and to others?</td>
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<td>6. Express your philosophy.</td>
<td>What are your current perspectives and beliefs about your prospective field? If you have previously written a professional philosophy, how has your philosophy changed or evolved? What factors influenced these changes?</td>
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Objectives may be developed for different areas of learning, that is, intellectual development, physical development, or social-emotional development. Objectives guide the development of assessment procedures and instructional experiences. They help professionals focus their efforts on the subject content that is most important for participants to learn.

GOALS OF PHYSICAL EDUCATION, EXERCISE SCIENCE, AND SPORT

An important goal for many physical education, exercise science, and sport leaders is the improvement of the well-being and quality of life of individuals who participate in our programs. We can accomplish this by socializing individuals into the role of participants who will make a long-term commitment to participation in enjoyable and meaningful physical activity and sport experiences. Our main purpose is to provide people with the skills, knowledge, and dispositions to participate in regular physical activity throughout their lifespan.

Contemporary physical education, exercise science, and sport programs are growing in popularity. These programs are diverse in content and varied in setting, and they serve people of all identities. What are the goals and objectives of these contemporary programs? What outcomes should participants in these programs achieve? These questions can be addressed by researching the professional organization of your discipline, such as the National Athletic Trainer’s Association (www.nata.org), the North American Society for Sport Management (www.nassm.com), the American College of Sports Medicine (www.acsm.org), or the Society of Health and Physical Educators (www.shapeamerica.org) to name a few. Having an understanding of the professional goals of your discipline will help guide you in how to develop goals and learning objectives for your students, players, or clients.

LEARNING DOMAINS

Objectives for learning can be classified into multiple domains: cognitive (thinking), affective/social (feeling/interaction), and psychomotor (doing). The cognitive domain is concerned with the acquisition of knowledge and its application. The
affective/social domain includes the promotion of values, the fostering of social skills, and the enhancement of emotional development. The psychomotor domain involves the development of motor skills and physical fitness.

It is critical that professionals consider all domains when planning learning experiences to meet individuals’ needs. Separation of behaviors into domains simplifies the formulation of objectives. It enables us to more readily take into account individuals’ levels of development in each domain as we design and conduct activities. However, these domains are interrelated and, as professionals, we must keep this at the forefront of our minds as we work with people in our programs.

Education is a process of learning that can take place in many different settings. Physical education, exercise science, and sport programs contribute to the cognitive, affective/social, and psychomotor development of program participants. These programs involve people of all identities, from diverse contexts, and with many different goals. As we continue to expand our programs, we must actively seek to extend the opportunity for participation to all people, regardless of gender, race, ethnic and cultural background, and socioeconomic status.

Taxonomies

Taxonomies serve as a guide for professionals in planning for learning outcomes and achievement of the desired goals. A taxonomy organizes objectives in a progressive hierarchy, from low to high, using developmental theories as a basis for formulating those objectives. Behaviors at one level serve as the foundation and prerequisite for behaviors at a higher level. Stated more simply, lower-order objectives serve as stepping stones to the attainment of higher levels of achievement.

Taxonomies have been developed for each domain. These taxonomies offer guidelines for professionals in all fields/disciplines who work with people to enhance learning and promote human development.

Cognitive Domain

The cognitive domain is concerned with the acquisition of knowledge and the development of intellectual skills. Bloom and his colleagues originally developed a taxonomy of educational objectives for this domain in the 1950s, which was not revised until 2001 by Anderson and Krathwohl. These objectives reflect an increase in complexity at each level of development. Remembering facts is the initial objective, and from this grows understanding and application of concepts, critical analysis, evaluation, and creating. (The Cognitive Domain box presents the objectives for this domain.)

Development of knowledge and understanding is an important objective for physical education, exercise science, and sport programs in all settings.
## THE COGNITIVE DOMAIN

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<th>Category</th>
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<th>Application</th>
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| 1. Remembering | Ability to recall; retrieving relevant knowledge from long-term memory; represents lowest level of learning outcomes in cognitive domain. | **Physical Education**—What are the critical elements of the overhead clear in badminton?  
**Exercise Science**—What are the health-related components of fitness?  
**Sports Programs**—What are the primary rules of basketball? |
| 2. Understanding | Constructing meaning of instructional materials (oral, written, and graphic); understanding without perceiving implications; interpret; translate; estimate; predict; represents lower level of cognitive domain. | **Physical Education**—Compare the critical elements of the overhead clear in badminton to the softball/baseball throw.  
**Exercise Science**—Compare the health and motor components of fitness.  
**Sports Programs**—How are the primary rules of basketball similar to soccer? |
| 3. Applying   | Ability to use learned information in new situations; can apply rules, methods, and concepts; can carry out or use a procedure in a given situation; higher level of understanding. | **Physical Education**—When is the best time to use the overhead clear in badminton? Why?  
**Exercise Science**—What exercises would you prescribe to a 40-year-old woman who is just starting to exercise?  
**Sports Programs**—On offense, the point guard has picked up her dribble and you are being defended by an opponent. What movement(s) could you do to create opportunities to get open? |
| 4. Analyzing | To break down material into its component parts; organization and relationships between parts made clear; identifying; selecting; inferring; higher intellectual level. | **Physical Education**—In a game of badminton, your opponent consistently wins the point by landing the shuttle at the front of the court. Describe how you will adjust your game play to improve your opportunities to score.  
**Exercise Science**—Select cardiovascular exercises for a 55-year-old man who just had a minor heart attack.  
**Sports Programs**—In a basketball game, your opponent is scoring most of their points inside the key. Describe how you would change your defense to prevent your opponent from scoring. |

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| 5. Evaluating | Make judgments based on criteria and standards; second highest learning outcome because it contains elements of all other categories. | **Physical Education**—In a singles game of badminton, you lose by a score of 15–6. Reflect upon your game play and explain what tactics and strategies your opponent utilized to win the game and describe what skills, tactics, and strategies you need to work on to improve your game performance.  
**Exercise Science**—How will you adjust your client’s workout based on the following information from a pre- and postassessment: increase in 1 rep max on the bench press by 20 pounds, flexibility did not improve, and resting heart rate lowered 2 beats/minute.  
**Sports Programs**—Throughout the season thus far, your team is averaging 20 turnovers/game. Create drills your team can practice that have the potential to decrease the number of turnovers per game. |
| 6. Creating | Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure. | **Physical Education**—In a singles badminton tournament, you will face the same opponent that you lost to in last year’s tournament. Design a game plan as to how you will approach all aspects of the match. For example, if your opponent has a powerful first serve, how will you position yourself to return the ball or if your opponent approaches the net after the second return, where will you place your shot on the court?  
**Exercise Science**—Your client (from above) approaches you and wants to change his goals. He decides that he wants to train for a Tough Mudder and would like you to create a program to prepare for this event, which is 4 months away.  
**Sports Programs**—Your team is going to face a new opponent for the first time. You and your team study film of their previous games. Create a game plan as to how you are going to stop their high-tempo, fast-break offense. |
Our programs are concerned with educating individuals about the many dimensions of human movement, including the knowledge within our discipline.

Professionals in all settings need to place more emphasis on the scientific principles and concepts underlying the performance of various activities. Physical activities are not performed in a vacuum. As such, instructors should continually provide appropriate knowledge and information for participants and encourage them to question what they are doing. “Why should I exercise regularly? How will this exercise contribute to the rehabilitation of my knee? Why is warming up before exercising important? How can I get more distance for my golf drive? What can I do to throw the ball farther? Why is it important to play by the rules? Why are my experiences different from others?” Participants should be provided with more opportunities to think, to apply problem-solving skills to physical activity situations, to experience situations that allow for creativity and individual expression, and to question, critique, and challenge inequities and injustices within our discipline.

Professionals can also use fitness activities to stimulate cognitive development. Students can self-analyze their fitness levels, identify areas of improvement, apply their knowledge to design an individualized exercise program, and evaluate their progress regularly, adjusting their program as needed. These cognitive skills of analysis, identification, application, evaluation, and creating contribute to the goal of preparing individuals to be lifelong learners. These activities also give these individuals the skills to modify their fitness programs during their adult lives as their needs change, a critical feature of lifespan involvement.

**Affective/Social Domain**

Many factors influence individuals’ learning, including their feelings about themselves, the learning experience, and the subject. Most recently, the COVID-19 pandemic has negatively affected many people’s mental health. Whether that is due to isolation and lack of social engagement, financial struggles, or being burnt out from numerous years of limitations, difficulties, and challenges. The likelihood of this affecting people of all identities for years to come is relatively high. These circumstances, among many others, showcase the importance and need to focus on the affective/social domain. Relating to affective domain, we utilize Krathwohl and associates taxonomy for the affective domain. This taxonomy reflects the development of values, appreciations, attitudes, and character. As individuals progress through the levels within this domain, they move from a concern about themselves to a value structure that embraces concern for others. At the highest level, their internalized values directly influence their choices and actions. Affective development also encompasses social and emotional development. (The objectives are shown in the Affective/Social Domain box.)
## THE AFFECTIVE/SOCIAL DOMAIN

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<th>Category</th>
<th>Description</th>
<th>Application</th>
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| 1. Receiving              | Sensitivity to the existence of certain events or stimuli; awareness; willingness to receive or attend to phenomena. | PE—Students follow the teacher’s directions.  
Ex Sci—A cardiologist listens to her patient to describe their symptoms.  
Sport—Players choose to shake hands with the opposing team after a win or loss. |
| 2. Responding             | Active attention to stimuli; reacting to a situation beyond mere perception; responding overtly. | PE—Students choose to use rock-paper-scissors to decide whether the ball was in or out in a game instead of arguing the call.  
Ex Sci—A client questions the benefits and potential side effects of a new fad diet.  
Sport—A player practices hitting in the batting cages before and after the team’s actual practice on a daily basis. |
| 3. Valuing                | Assigning worth to stimuli or phenomena; placing a value on events; characteristics of a belief or attitude; appreciation. | PE—Students voluntarily participate in physical activity outside of school.  
Ex Sci—Elderly participants create a walking club in their neighborhood for social and physical development.  
Sport—Players demonstrate fair play and good sportspersonship to their coaches, teammates, and opponents. |
| 4. Organizing             | Internalizing values and organizing them into a system; determining interrelationship among values; arranging values in hierarchical form; comparing, relating, and synthesizing values. | PE—Students accept responsibility for their own behavior.  
Ex Sci—Individuals accept a physical therapist’s guidelines as to when they can return to competition.  
Sport—A player recognizes his or her own abilities, limitations, and values and develops realistic aspirations of how he or she can contribute to the team. |
| 5. Characterizing by a value or complex | Acting in accordance with internalized values; behaving consistently with accepted values and integrating them into personality. | PE—Students appreciate and value the opportunity to collaborate and socialize with their classmates as they problem-solve how to accomplish a challenge or task successfully.  
Ex Sci—Individuals commit to 30 minutes of daily physical activity to enhance their health and decrease stress levels.  
Sport—Players choose to eat healthy and work hard to increase their performance instead of taking performance-enhancing drugs. |
All people have certain basic social needs. These include feelings of belonging, recognition, self-respect, and love. Fulfillment of these needs contributes to social development. Physical education, exercise science, and sport programs can help participants meet some of these social needs. For example, elderly participants who join an exercise program typically benefit not only physically but also socially, deriving pleasure from meeting with their group regularly and forming new friendships. Such interactions help to diminish the feelings of isolation experienced by many elderly who live alone.

Promotion of a positive self-concept and enhancement of feelings of self-worth and self-respect are desired outcomes associated with this domain. One way that physical education, exercise science, and sport activities can contribute to these outcomes is to provide opportunities for individuals to develop competence in physical skills and to challenge themselves to attain new levels of achievement and realistic goals. Experiences should be structured to allow for meaningful success for all involved. Individuals who perceive themselves as competent and have confidence in themselves as movers are more likely to seek involvement in physical activities.

The development of positive attitudes and appreciation for the contributions that engaging in regular physical activity makes to lifelong health and well-being are outcomes that physical education, exercise science, and sport professionals are increasingly emphasizing. Knowledge of the benefits of physical activity and the development of the skills to participate in various activities are not, in and of themselves, sufficient to promote lifespan involvement. If we are to achieve our goal of promoting regular physical activity, we must instill in participants the motivation to lead a healthy, active lifestyle. Our programs should help participants appreciate the contribution that physical activity can make to their health, performance, and rewarding use of leisure time.
Professionals can promote social responsibility, an important component of good citizenship. Helli-son developed a model to promote responsibility that has been successfully used with at-risk students in both school- and community-based programs. This model emphasizes personal growth through self-control, involvement, goal setting, and assisting others. Success, personal awareness, problem solving, and self-reflection are also incorporated within this model. This approach and other thoughtfully designed instructional experiences can do much to promote the development of socially acceptable values.

Professionals must also give careful thought to the influence of their own behaviors, values, and actions on their program participants. How important is it for professionals to practice what they preach? Professionals who aspire to promote affective and social development must carefully weigh this question. As leaders, they serve as models for participants. Consideration for the needs and feelings of others, respect for each individual, and enthusiasm for physical activity are some behaviors physical educators, exercise science, and sport professionals should exhibit if they want to promote the same behaviors within their participants.

**Psychomotor Domain**

Developed by Dave, the taxonomy of objectives in the psychomotor domain shows a progression of development that provides the foundation for programs of physical activities. The lower-order objectives focus on the acquisition of basic movements and perceptual abilities. The higher-order objectives emphasize the development of fitness and highly skilled movements, as well as increased creativity in the use of these movements. (The Psychomotor Domain box lists the objectives of this domain.)
## THE PSYCHOMOTOR DOMAIN

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Application</th>
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<tbody>
<tr>
<td>1. Imitation</td>
<td>Observing and patterning behavior after someone else, perhaps with low-quality performance.</td>
<td>PE—After the physical education teacher demonstrates the shooting technique in basketball, the students imitate her performance without a ball, then with a ball in self-space before they can shoot at the basket.</td>
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<td>Ex Sci—Members of a yoga class follow the instructor’s directions as they move from a Downward Dog into a Warrior II pose.</td>
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<td>Sport—A volleyball coach demonstrates the approach to the spike and then has his players repeatedly perform the same approach (without a ball) before they participate in a spiking drill.</td>
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<tr>
<td>2. Manipulation</td>
<td>Ability to perform certain actions by following instructions and practicing.</td>
<td>PE—In a basketball shooting drill, the students shoot from self-selected distances (marked by poly spots) without a defender for 10 minutes at the beginning of each class period.</td>
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<td>Ex Sci—Members of a yoga class make up their own warm-up pattern, which consists of four different poses, at the start of each class.</td>
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<td>Sport—A softball coach demonstrates a soft toss drill to the team so that the players can work on their hand-eye coordination. The players get into six small groups and perform the same drill following the coach’s instructions.</td>
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<td>3. Precision</td>
<td>Refining; becoming more exact, with few apparent errors.</td>
<td>PE—Students repeatedly practice their gymnastics routine until it has seamless transitions and solid beginning and ending poses, and each movement has appropriate body alignment.</td>
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<td>Ex Sci—A client practices keeping her body straight and bending her elbows at a 90-degree angle as she attempts 10 traditional push-ups daily.</td>
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<td>Sport—A golfer reviews video clips of his putting technique. He adjusts the speed of his backswing as he hits golf balls from the same distance with the goal of getting 40 out of 50 into the cup.</td>
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<tr>
<td>4. Articulation</td>
<td>Coordinating a series of actions; achieving harmony and internal consistency.</td>
<td>PE—Students create a line dance that aligns to the beat of the music.</td>
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<td>Ex Sci—As a warm-up, a client jumps rope for 3 minutes consecutively without tripping over the rope or stopping due to fatigue.</td>
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<td>Sport—During a baseball game, the defensive team completes a perfect relay from right field to get the runner out at home.</td>
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<tr>
<td>5. Naturalization</td>
<td>Performing at a high level automatically, without needing to think much about it.</td>
<td>PE—During a soccer game, students move without the ball to create space and get open to receive a pass from their teammates.</td>
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<td>Ex Sci—A runner records negative splits over a 10-mile course without checking the time after each mile.</td>
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<td></td>
<td></td>
<td>Sport—A quarterback changes the offensive play call after noticing that the defense is setting up to blitz.</td>
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</tbody>
</table>
Sports, aquatics, and dance give individuals enjoyable activities for use during their free time. They offer a pleasurable means to relax after work and are popular recreational pursuits on the weekends. Development of motor skills for participation in sport and recreational activities is important for all people, including individuals with disabilities. Professionals in all settings must be prepared to teach individuals with a diversity of needs and to modify activities and instructional strategies to be appropriate to the abilities of the individuals with whom they are working. Challenging activities that lead to skill development and meaningful participation are essential to providing a positive learning experience for all individuals, including those with special needs.

**Physical Fitness Development**

The evidence supporting the contribution of physical activity and health-related fitness to well-being and quality of life is overwhelming. Development and maintenance of physical fitness has long been heralded as one of the most important outcomes of school physical education programs. Fitness promotion is the focus of many nonschool physical education, exercise science, and sport programs as well.

A progressive, systematic approach to the development of physical fitness should be used. First and foremost, the program should consider the needs of the individual. Based on these needs, the program should be designed to accomplish the desired outcomes. Careful attention should be given to helping individuals identify and develop proficiency in activities that are enjoyable and meaningful to them while contributing to the attainment of fitness. This will encourage individuals to make these activities an integral part of their lifestyle.

If we are to accomplish our objectives related to physical fitness, a multifaceted approach is needed. Obviously, we must teach exercises and activities that promote fitness. However, this is not enough. Through our programs, individuals must acquire the knowledge to design and modify their fitness program to meet their changing needs. Moreover, our
to meet the needs of participants in our programs? Assessment enables us to answer these and many other important questions.

Assessment should be a dynamic, ongoing process integrated into programs and viewed as an essential, crucial element of any program. The development of quality physical education, exercise science, and sport programs requires establishing clear goals, assessing participants’ needs, setting specific objectives, planning learning experiences, providing effective instruction, and evaluating the outcomes.

Assessment can yield important information about participants’ progress, program quality, instructional practices, and the effectiveness of professionals. Evaluation promotes accountability. Participants are accountable for their performance and professionals are accountable for participants’ achievements. Today more than ever, demonstrating the worth and value of our programs is critical. Assessment is central to this purpose because it provides meaningful information about learning and achievement related to goals, objectives, and outcomes across the learning domains.

Assessment Defined

Assessment is the process of gathering information to learn what participants know and are able to do, in order to determine their progress toward achievement of goals and objectives. Measurement is the process of gathering information or collecting data. Evaluation is the process of interpreting the information or data.

Assessment encompasses a variety of measurement, evaluation, and assessment techniques that have as their primary purpose the gathering and interpretation of information. This information is used to make decisions that will enhance the outcomes achieved and the experiences of participants in physical education, exercise science, and sport programs.

Purposes of Assessment

The main purposes of assessment include diagnosis, placement, monitoring of progress, determination of achievement, motivation, program improvement,
A personal trainer reviews the various assessments of a client’s fitness level, nutritional status, and lifestyle habits, and then designs an individualized wellness program for the client. Working with the athlete’s physician, an athletic trainer plans a program of exercise to restore the full range of motion to an athlete who is recovering from a rotator cuff injury.

Classification, or placement of individuals into groups based on their abilities, is another purpose of assessment. For children with disabilities, assessment influences their educational placement and the type of services they receive. Sport activity instructors commonly assign people to ability groups for instruction, believing that same-ability grouping facilitates learning.

Determination of achievement is one of the primary purposes of assessment. Physical education, exercise science, and sport programs involve purposeful activity directed toward the attainment of certain goals. Have the program participants achieved the stated objectives? Without assessment, how would we know whether our participants have achieved the desired objectives? Assessment can provide an indicator of achievement at the end of a program. When assessment is done at both the beginning and the end of the program, improvement can be seen. Incorporation of various assessment techniques throughout the program allows for the tracking of participants’ progress.

Another purpose of assessment is program evaluation. Assessment can provide evidence of the effectiveness of the program. Corporate fitness directors can document the progress and concomitant health gains made by employees enrolled in the program. This lets the employer know whether the program is beneficial to the employees and whether the investment in the program has yielded cost savings. This more global approach can also be used to improve the program. From this perspective, items such as program content, progression of instructional experiences, administration and organization, facilities and equipment, and time allocation are addressed as part of the overall program assessment. This enables professionals to make improvements in their programs to heighten their effectiveness.

### ASSESSMENT

Assessment is the process of gathering information to learn what participants know and are able to do in order to determine their progress toward achievement of goals and objectives. (See the Assessment box for a definition and list of purposes of assessment.)

Diagnosis is one of the most important uses of assessment. Diagnostic procedures can be used to identify individuals’ strengths and weaknesses, levels of abilities, and developmental status in the various domains. When working with children with disabilities, the adapted physical activity specialist may use the Test of Gross Motor Development 3 (TGMD-3) to measure children’s locomotor and object control motor development. A sport psychologist working with an intercollegiate athletic team to improve its performance uses several survey tests to find out athletes’ satisfaction, perception of team climate, attentional styles, and leadership roles. Additional knowledge gleaned from interviews of the athletes and coaches and from personal observation of the team during practice and games helps the sport psychologist identify factors limiting the team’s achievement.

Exercise and physical activity prescription uses diagnostic information to design programs to meet identified needs. A cardiac rehabilitation specialist uses the results of an exercise stress test to prescribe an exercise program for the postcardiac patient. A personal trainer reviews the various assessments of a client’s fitness level, nutritional status, and lifestyle habits, and then designs an individualized wellness program for the client.
Professionals who care deeply about their professional endeavors reflect upon all the information gathered via the assessment process to improve their own effectiveness. They might ask themselves, “Are there any changes that I can make in my presentation? Is the order of the instructional tasks the best sequence to enhance participants’ developments? Do I need to give participants more guidance?” These and other questions can help professionals enhance their effectiveness and thus influence the outcomes of the participants in their programs.

**CURRENT TRENDS: MOVING TOWARD THE FUTURE**

- As disciplines within the field of kinesiology continue to evolve, a wider range of professional philosophies will be developed to guide current and future professionals.
- National health and physical activity goals, such as those that form the foundation of *Healthy People 2030* and the National Physical Activity Plan, will provide broad and specific guidelines for individuals across the lifespan on how to lead a healthy and physically active lifestyle.
- Smart-phone apps and physical activity wristbands are increasing individuals’ interest in their physical activity levels as the apps and watches provide immediate access to their fitness outcomes.

**SUMMARY**

Philosophy is influenced by our social identities and systems of meaning and is critical to our endeavors. The major branches of philosophy include metaphysics, epistemology, logic, axiology, ethics, and aesthetics. Philosophies such as idealism, realism, pragmatism, naturalism, existentialism, and humanism have influenced the nature and practice of physical education, exercise science, and sport programs. Over the years, the philosophy...
of education through the physical has significantly influenced the design and conduct of our programs. Sport philosophy emerged as a specialized area of study in the mid-1960s and 1970s. As this area grew, emphasis shifted from philosophical issues associated with physical education in schools to the study of sport. Sport philosophers use logic and critical reasoning to study the meaning of physical activity and the mind-body relationship. As this discipline matured, the philosophical study of physical activity broadened.

Each professional should develop their own philosophy. One’s philosophy influences the goals and objectives or outcomes sought from one’s programs and the methods by which these goals and objectives are attained. Goals are broad statements of aims that reflect desired accomplishments. Objectives are more specific statements of outcomes that build progressively to the achievement of the goals.

Human behavior is often described with reference to learning domains: cognitive, affective/social, and psychomotor domains. Taxonomies organize the objectives associated with each domain into hierarchies. These taxonomies guide professionals in designing programs to meet the needs of their participants. Physical education, exercise science, and sport programs contribute in many ways to learning in these three domains.

Assessment of learning is critical in physical education, exercise science, and sport. Assessment is a continual process that serves many purposes. These include diagnosis, prescription, classification, determination of achievement, documentation of progress, enhancement of motivation, program improvement, and professional development. There are many types of assessment methods for professionals to utilize.

Chapter 3 will discuss the role of physical education, exercise science, and sport in our society.

**DISCUSSION QUESTIONS**

1. Of the six major philosophies, which one do you identify with the most? Why do you identify with this philosophy? How does this philosophy align with your social identities and systems of meaning? How do you think your philosophical perspective can impact you as a future professional?

2. As a physical educator, exercise scientist, or sport leader, how do you develop goals and objectives for your program? How do these goals and objectives align with your professional philosophy?

3. Describe how assessment aligns with program goals and objectives. What assessments would you use to learn whether your students, clients, or players have met the goals and objectives?

**GET CONNECTED**

**Cooper Institute**—information about the Fitnessgram and Activitygram assessments, fitness resources, and research.  

**International Association for the Philosophy of Sport**—the website for the organization offers access to resources related to the philosophy of sport, including a blog of current news.  
[http://www.iaps.net/ > Resources](http://www.iaps.net/ > Resources)

**Society of Health and Physical Education (SHAPE) America**—SHAPE America offers information about national standards for physical education as well as coaches, codes of conduct for sport and physical education, and position papers related to philosophical issues such as fitness for physical activity professionals and the use of physical activity for punishment. The national standards were revised in 2014.  
[https://www.shapeamerica.org/](https://www.shapeamerica.org/)
SELF-ASSESSMENT ACTIVITIES

These activities are designed to help you determine whether you have mastered the material and competencies presented in this chapter.

1. Compare the characteristics of physical education, exercise science, and sport programs guided by each of the major philosophies: idealism, realism, pragmatism, naturalism, existentialism, and humanism.

2. Using the Developing Your Professional Philosophy box, attempt to write your philosophy of physical education, exercise science, or sport. Reflect on your social identities, systems of meaning, and lived experiences; review various philosophies; and take time to talk with some of your professors about their philosophy.

3. Reflect on your experiences in youth, interscholastic, and intercollegiate sport. How did these experiences contribute to your development in the cognitive, affective/social, and psychomotor domains? What changes could have been made in the programs to further enhance your development in each of the domains?

4. Refer to the 12 Steps to Understanding Research Reports box located in Chapter 1. Before you complete a 12 Step, first select an original research article (quantitative or qualitative) of a topic of your interest. Describe how and why you selected this article as well as why it is considered an original research article.

REFERENCES


